

PLANNING GUIDANCE

Planning Principles & Procedures – FY11



US Army Corps of Engineers
BUILDING STRONG®



Objectives

- Identify sources of planning guidance
- Familiarize with Principles and Guidelines and ER 1105-2-100



National Policy



Administration



Congress



Planning Guidance

- NATIONAL POLICY
 - ▶ LAWS
 - ▶ RULES AND REGULATIONS
 - ▶ EXECUTIVE ORDERS
 - ▶ PRINCIPLES AND GUIDELINES
- Water Resources Development Act (WRDA)
- Energy and Water Development Appropriations Act



Principles and Guidelines (P&G)

- Economic and Environmental Principles & Guidelines for Water and Related land Resources Implementation Studies (P&G), Water Resources Council, 1983
- WRDA 2007, Section 2031 calls for revisions to P&G within 2 years
 - ▶ National priorities: maximize sustainable economic development, avoid unwise use of floodplains, protect & restore functions of natural systems
 - ▶ Considerations: include R&U, public safety, value to low income communities, nonstructural solutions, interaction w/ other projects, IWRM, projects justified by public benefits



Principles

1. Purpose and Scope
2. FEDERAL OBJECTIVE
3. State and Local Concerns
Uncertainty
4. International Concerns
5. ALTERNATIVE PLANS
6. PLAN SELECTION
7. Accounts
8. Discount Rate
9. Period of Analysis
10. Risk +
11. Cost Allocation
12. Planning Guidance
13. Effective Date



Principles: Federal Objective

- Contribute to **National Economic Development** consistent with protecting the Nation's environment pursuant to national environmental statutes, applicable executive orders and other Federal planning requirements.



Principles: Alternative Plans

- Consider all reasonable alternatives, formulated in a systematic manner
 - ▶ NED Plan
 - ▶ Other plans that further address Federal, state, local, & Intl concerns
 - ▶ Each alt considers 4 criteria in formulation:
 - **Completeness**
 - **Effectiveness**
 - **Efficiency**
 - **Acceptability**
 - ▶ Mitigate for adverse impacts (integral part of each plan)
 - ▶ Existing plans (e.g., state plans) to be considered



Principles: Plan Selection

Rule: Select NED Plan

(maximize net economic benefits consistent w/ protecting environment)

	ANNUAL COSTS	ANNUAL BENEFITS	NET BENEFITS	BCR
PLAN A	1000	1500	500	1.5
PLAN B	3500	5000	1500	1.4
PLAN C	5000	6000	1000	1.4

Net Benefits = Annual benefits less annual costs

BCR = Annual benefits divided by annual costs



BUILDING STRONG®

Planning Guidance

**Administration (e.g., CEQ, OMB) &
Congress**



**Assistant Secretary
of Army for Civil
Works**



**Headquarters,
Washington, DC**



Divisions



Districts



Corps Planning Guidance

- Army Regulations (AR)
- Engineering Circulars (EC)
 - ▶ Ex: EC 1105-2-409 (Planning in a Collaborative Environment)
 - ▶ Others (listed subsequently)
- Engineering Manuals (EM)
- Engineering Pamphlet (EP)
 - ▶ EP 1165-2-1: Digest of Water Resources Policies
- Policy Guidance memos (CECW-CP)
- Helpful links:
 - ▶ <http://www.usace.army.mil/CECW/PlanningCOP/Pages/planlib.aspx>
 - ▶ <http://www.usace.army.mil/CECW/PlanningCOP/Pages/legislinks.aspx>



Planner's Library

Planner's Library - Windows Internet Explorer


http://www.usace.army.mil/CECW/PlanningCOP/Pages/planlib.aspx

File Edit View Favorites Tools Help

Convert Select

BBS Home SmartZone Communications ... Shared Documents Planner's Library

Page Tools

 **US Army Corps of Engineers**
Headquarters

BUILDING STRONG®

ABOUT US SERVICES BUSINESS WITH US CAREERS LIBRARY PRESS ROOM CONTACT US SEARCH

Headquarters > Civil Works > Planning COP > Planner's Library

Planner's Library

News
Policy & Policy Compliance Division
Planner's Library
Legislative Links
Planner's Study Aids
Centers of Expertise
Peer Review
Planning Models
Training and Career
Related Links
Planning Ahead Newsletter
Planning CoP Conferences
Planning Guidance Memoranda
Intranet PCoP (Restricted to Corps staff)

Planning ABCs
[What is Planning?](#): This introduction to planning explains the purpose and philosophy behind good planning.
[Corps Planning Process](#): This page presents an introduction to the reconnaissance and feasibility phases of a project.
[6 Steps to a CW Project](#): This page presents a 6 step overview of the development of Civil Works Projects.
[21 Steps to a Project](#): This PowerPoint presentation provides a good overall perspective into the 21 steps that a project goes through in order to get approved and funded.
[Explanation of the Principles and Guidelines](#): This page presents an overview of the Principles and Guidelines.
[Civil Works Introduction](#): This PowerPoint presentation provides a basic introduction to planners new to the Corps.
[Planning Primer](#), IWR Report 97-R-15, Nov 1997: This pamphlet is an introduction to planning for those who have had no formal training in planning and how it is done. This pamphlet will introduce you to the manner in which a planner approaches, analyzes and solves a problem.
[Planning Manual](#), IWR Report 96-R-21, Nov 1996: This document helps explain planning to those that are new and helps experienced planners in the field become better planners. The core of this manual's content is based on the six step planning process. This model provides a robust method for approaching a variety of problems.
[Project Partnership Kit](#), IWR Report 96-R-10, Jan 2001: This report presents "Corps 101" for State, county and local governments and agencies interested in sponsoring a Civil Works study or project. It covers partners rights and responsibilities; Corps missions and programs; who's who in the Corps; phases of project development; funding and financing; negotiable items; and project documents.
[Commonly Used Acronyms](#)

Planning Guidance

- **Principles and Guidelines, US Water Resources Council, Mar 1983**
The Principles and Guidelines guide the formulation and evaluation studies of the major Federal water resource development agencies, including Corp's Civil Works studies. The full text of the P&G are included in ER 1105-2-100 (see above).
- **Principles and Guidelines References**
- **Planning Guidance Notebook**, ER 1105-2-100, Apr 2000
The Planning Guidance Notebook provides the overall direction by which the Corps of Engineers civil works projects are formulated, evaluated and selected for overall implementation.

The following links are documents inadvertently omitted from the revised PGN:

- [General Investigations Fact Sheet](#)
- [Instructions for GI Fact Sheet](#)

Done

start

Planner's Library ... Inbox - Microsoft ... Adobe Acrobat Pro Microsoft Word P-Cubed 2010 Microsoft PowerP...

Local intranet 100% 11:39 AM

Legislative Links

Legislative Links - Windows Internet Explorer

http://www.usace.army.mil/CECW/PlanningCOP/Pages/legislinks.aspx

File Edit View Favorites Tools Help

Convert Select

BBS Home SmartZone Communications... Shared Documents Planner's Library Legislative Links

US Army Corps of Engineers
Headquarters

BUILDING STRONG®

ABOUT US SERVICES BUSINESS WITH US CAREERS LIBRARY PRESS ROOM CONTACT US SEARCH

Headquarters > Civil Works > Planning COP > Legislative Links

News
Policy & Policy Compliance Division
Planner's Library
Legislative Links
Planner's Study Aids
Centers of Expertise
Peer Review
Planning Models
Training and Career
Related Links
Planning Ahead Newsletter
Planning CoP Conferences
Planning Guidance Memoranda
Intranet PCoP (Restricted to Corps staff)

Legislative Links

Statutes

- **Water Resources Development Act of 2007**
 - Public Law 110-114, 121 Stat. 1041
 - Implementation Guidance
 - Statutory Text
 - WRDA 2007 Summary
 - Principles and Guidelines Revisions
- **Water Resources Development Act of 2000**
 - General and Specific Guidance
 - Statutory Text
- **Water Resources Development Act of 1999**
 - General and Specific Guidance
 - Statutory Text
- **Water Resources Development Act of 1996**
 - General Guidance
 - Statutory Text
- Rivers & Harbors Act of 1968
- All other WRDAs, Flood Control Acts and Rivers and Harbors Acts
- Clean Water Act
- Comprehensive Environmental Recovery, Compensation, and Liability Act (SUPERFUND)
- Emergency Planning and Community Right-to-Know Act
- Endangered Species Act
- National Environmental Policy Act
- Resource Conservation and Recovery Act

Congressional Committees with jurisdiction over the Civil Works Program:

- **Authorizations:**
 - House Committee on Transportation and Infrastructure
 - Subcommittee on Water Resources and Environment
 - Senate Committee on Environment and Public Works
 - Subcommittee on Transportation, Infrastructure, and Nuclear Safety
- **Appropriations:**
 - House Committee on Appropriations
 - Subcommittee on Energy and Water Development
 - Senate Committee on Appropriations
 - Subcommittee on Energy and Water Development

Local intranet 100%

start

Legislative Links - ... Inbox - Microsoft... Adobe Acrobat Pro Microsoft Word P-Cubed 2010 Microsoft PowerP... 11:41 AM

Corps Planning Guidance

- Engineering Regulations
 - **ER 1105-2-100 (PGN)**
 - **ER 1105-2-101 (R&U)**
 - **ER 200-2-2 (NEPA)**
 - **ER 1165-2-YYY (Policy)**
 - ▷ **Ex: ER 1165-2-209 (Civil Works Review Policy)**
 - **All ER's:**
<http://140.194.76.129/publications/eng-regs/>



Engineer Regulations (ER's)

ENGINEER REGULATIONS - Windows Internet Explorer

http://140.194.76.129/publications/eng-regs/

File Edit View Favorites Tools Help

Convert Select

BBS Home SmartZone Communic... Shared Documents Planner's Library Legislative Links ENGINEER REGUL...

US Army Corps of Engineers
HEADQUARTERS

BUILDING STRONG®

[[USACE Home](#)] > [[Publications](#)] > [[Engineer Regulations](#)] [Search](#)

ENGINEER REGULATIONS superseded and rescinded ERs

Updated: 2009 December 10

PUB.NUMBER	PAGES	PROPONENT	TITLE	REQUIRED FORMS	PUB.DATE
ER 1-1-11	018	CEMP-CE	Progress, Schedules, and Network Analysis Systems		15 Jun 95
ER 1-1-25	016	CERM-MP	Command Visits		15 Dec 83
ER 1-2-2	003	CECW-PL	Water Resources Policies and Authorities Substantive Congressional Contacts (RCS: CECW-P-21)		01 Jul 91
ER 5-1-9	003	CERM-M	Assignment and Transfer of Project Responsibilities		15 Mar 96
ER 5-1-10	003	CEMP-MP/CECW-EP	Corps-wide Area of Work Responsibility		01 Apr 09
ER 5-1-11	17	CECW-CB	U.S. Army Corps of Engineers Business Process		01 Nov 06
ER 5-1-13	36	CERM-P	U.S. Army Corps of Engineers Policy on Regional Business Centers (RBCs)		25 Jan 08
ER 5-1-14	27	CERM	Resource Management - USACE Quality Management System		30 Apr 09
Errata Sheet #1					23 Jun 09
ER 5-1-15	45	CESI-P	Strategy and Integration		1 Dec 09

Internet 100%

start ENGINEER REGU... Inbox - Microsoft... Adobe Acrobat Pro Microsoft Word P-Cubed 2010 Microsoft PowerP... 11:44 AM

PLANNING GUIDANCE



ER 1105-2-100

PLANNING GUIDANCE
NOTEBOOK

GUIDANCE FOR
CONDUCTING CIVIL
WORKS PLANNING
STUDIES
April 2000



US Army Corps
of Engineers

ER 1105-2-100
22 April 2000



BUILDING STRONG®

P&G and ER-1105-2-100

P & G	ER 1105-2-100 (2000 VERSION)
Principles	Main ER
Guidelines:	
Chapter 1, Standards	Main ER, Appendix E
Chapter 2, NED Proc.	Appendix E
Chapter 3, EQ Proc.	Appendix C



ER 1105-2-100, Main ER

Chapter 1 - Introduction

Chapter 2 - Planning Principles

Chapter 3 - Corps Civil Works Missions

Chapter 4 - Types of Studies, Reports and Procedures



ER 1105-2-100, Appendices

- A - References
- B - Public Involvement
 - ▶ Public Involvement, Collaboration and Coordination Requirements
 - ▶ Public Involvement Strategy
 - ▶ Study Management Coordination



ER 1105-2-100, Appendices

- C - Environmental Evaluation & Compliance
 - ▶ Procedures for Environmental Evaluation (EQ Acct)
 - ▶ Ecological, Cultural, Aesthetic Resources
 - ▶ Water Quality and Related Requirements
 - ▶ Air Quality and Related Requirements
- D - Economic and Social Considerations
 - ▶ Economic Considerations - general, applicable to all civil work missions
 - ▶ Social Effects



ER 1105-2-100, Appendices

- E - Civil Works Missions & Evaluation Procedures (for each mission):
 - Federal interest
 - Types of improvements
 - Specific policies
 - NED & NER benefits evaluation procedures
 - Cost sharing
- F - Continuing Authorities (CAP)
- G - Planning Reports and Programs
- H - Review & Approval of Decision Documents



New EC's

- Policy Guidance on Certification of Ecosystem Output Models (memo Aug 2008)
(http://www.usace.army.mil/CECW/PlanningCOP/Documents/news/eco_models.pdf)
- 1165-2-209 – Civil Works Review Policy
- 1105-2-411 – Watershed Planning
- 1105-2-412 – Assuring Quality of Planning Models
- 1165-2-211 – Sea Level Change Considerations in CW Programs (July 2009)
(<http://140.194.76.129/publications/eng-circulars/ec1165-2-211/toc.html>)



CIVIL WORKS REVIEW POLICY (EC 1165-2-209)

- Applies to all USACE elements having civil works responsibilities.
- Covers all levels of review from basic quality control to independent external peer review.
- All feasibility, reevaluation, major rehabilitation, project modification, post-authorization change studies.
- All CAP projects.
- All design performed for new projects, modifications to existing projects, and/or on a reimbursable basis.
- All O&M plans, reports, manuals, evaluations, and assessments etc.



Review Plans Set the Strategy

- RPs are stand alone documents and complement the PMP.
- RPs (like PMPs) are living document and should be updated as the study progresses.
- RPs are to be coordinated with the appropriate PCX and allied PCX's.
- MSC Commanders approve the RP.
- RPs lay out the levels of review to be conducted.
- RPs will be posted on the home District public website.
- Public must be afforded the opportunity to comment on RPs.
- RPs for PED/Construction phase will be completed and presented at the CWRB.



New Names for Review Types

- **District Quality Control (DQC)**
 - ▶ Managed and conducted in home District by staff not directly involved with the study.
- **Agency Technical Review (ATR)**
 - ▶ Conducted by USACE outside of home District; for Planning products, managed by PCX
- **Independent External Peer Review (IEPR)**
 - ▶ Conducted by an outside eligible organization (OEO) - IRS 501(c)(3).
 - ▶ Scope of review covers all planning, engineering (including safety assurance), economics, and environmental analyses performed for the study
- **Safety Assurance Review**
- **Policy and Legal Compliance Review**



Any Of The Following Factors Require Independent External Peer Review:

- (1) Significant threat to human life
- (2) Total Project Cost > \$45M
- (3) Request by State Governor of an affected state
- (4) Request by head of Federal or state agency
- (5) Significant public dispute (size, nature, effects)
- (6) Significant public dispute (economics, or environ costs, benefits)
- (7) Novel methods, complex challenges, precedent-setting methods
- (8) Any other circumstances the Chief warrants.



Watershed Plans: EC 1105-2-411

- Provides guidance on watershed planning for Integrated Water Resources Management
- Emphasizes Systems Approach, Collaboration (Partnerships), Leveraging of Resources, Larger Geographic Areas
- Follows Six Step CW Planning Process Framework
- Output – Watershed or Strategic Plan
- May identify potential Corps projects for further study
- Have an interim Assessment (Study) Agreement Model



Assuring Quality of Planning Models (EC 1105-2-412)

BASIC PHILOSOPHY

- No more “home grown” models
- Confidence and transparency in models
- Agency and External review panels being able to have enough information to understand model and its intended usage
- Keep current with technology
- Practicality in data requirements as well as ease of use
- Flexibility for a wide range of applications
- Success will be:
 - ▶ Complete toolbox of models
 - ▶ Trained users
 - ▶ Corporate process to keep models current
 - ▶ Appropriate, timely and cost-effective analysis to support decision making



Policy Guidance on Certification of Ecosystem Output Models (Aug 08)

- Key areas of the new policy include:
 - ▶ The importance, use and review of conceptual models
 - ▶ Approval of a list of standard methodological approaches
 - ▶ Conditions for the approval of US Fish and Wildlife Services (USFWS) Habitat Suitability Index (HSI) models
 - ▶ Conditions for approval of existing ecosystem output models that are documented and tested to the level required by EC 1105-2-407
 - ▶ Conditions under which the assessment of ecosystem output models will be managed by USACE or by an outside eligible organization (OEO)



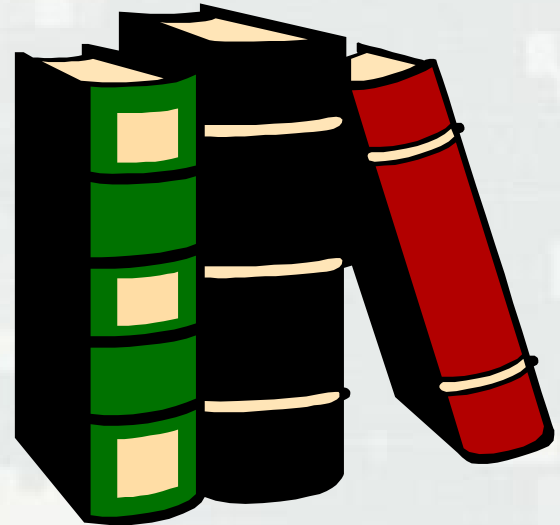
Draft Revised P&G

- History
 - ▶ Required by Sect. 2031 WRDA 2007
 - ▶ Several drafts, most recent released by CEQ Dec 2009
 - ▶ Currently under review by NAS, public through 2010
- Key Points:
 - ▶ Co-equal environmental and economic objectives
 - ▶ Maximize net national econ, environ, & social benefits
 - ▶ Applies to all federal agencies
 - ▶ Account for ecosystem services
 - ▶ Use watershed & system approaches
 - ▶ Use monetary & non-monetary benefits & costs
 - ▶ Account for significant effects
 - ▶ Address R&U, climate change
 - ▶ Address public safety, environmental justice
 - ▶ Still uses Corps' 6-step planning process



Procedural Guidance

- Research Reports
- Manuals
- Engr. Pamphlets
- Engr. Technical Letters
- Division/Districts



Summary

- Sources of Planning Guidance are:



Administration



Congress



ASA(CW), HQ's

- ER 1105-2-100 is most important guidance for Corps planners.

